CAL STATE EAST BAY

Office of Research and Sponsored Programs
(ORSP)

Responsible Conduct of Research (RCR)
Training

Background

Responsible Conduct of Research (RCR) is defined by NIH, "...as the practice of scientific investigation with integrity. It involves the awareness and application of established professional norms and ethical principles in the performance of all activities related to scientific research." Moreover, the NSF states that RCR is "critical for excellence, as well as public trust, in science and engineering." Consequently, education in RCR is considered essential in the preparation of future scientists and engineers.

RCR is achieved by understanding and adhering to the principals of ethics and integrity. The objectives of RCR training are multi-faceted:

- Provide an understanding of ethics
- Encourage best practices in the conduct of research and scientific investigations
- Foster an ability to recognize an ethical choice and the ability to make a principled decision

[California State East Bay's Responsible Conduct of Research Policy](#) requires under-graduate students, graduate students, postdocs, participants, principal investigators, key personnel, and others as described in awards and regulations, receiving financial support (including salaries and wages, tuition, and stipend) awards to receive training in Responsible Conduct of Research (RCR).

Accountability/Responsibility

Individuals:
It is the responsibility of the individual employee engaged in research funded by a federal agency to complete required RCR training within the time frame prescribed by the agency or within an appropriate reasonable time frame. Failure on the part of the individual to complete the necessary training may result in the need to terminate the financial support.

Principal Investigators:
It is the responsibility of the Cal State East Bay Principal Investigator to ensure that the individuals engaged in research are informed of the RCR training requirement and that the requirement has been met. The PI must keep documentation of the completion, such as in the form of a log tracking time in session, completion certificates, or other documentation.

Federal Agency Policies and Procedures

Examples of federal agency RCR policies and procedures are provided below. Check federal guidance for requirements of other federal agencies:

[National Institutes of Health (NIH) Update on the Requirement for Instruction in the Responsible Conduct of Research](#)

NIH Policy: "This Notice applies to the following programs: D43, D71, F05, F30, F31, F32, F33, F34, F37, F38, K01, K02, K05, K07, K08, K12, K18, K22, K23, K24, K25, K26, K30, K99/R00, KL1, KL2, R25, R36, T15, T32, T34, T35, T36, T37, T90/R90, TL1, TU2, and U2R." **"**This policy also applies to any other NIH-funded programs supporting research training, career development, or research education that require instruction in responsible conduct of research as stated in the relevant funding opportunity announcements."

[National Institutes of Health (NIH) FY 2022 Updated Guidance: Requirement for Instruction in the Responsible Conduct of Research](#)

"**Format of Instruction**: Discussion-based instruction in the responsible conduct of research is expected to remain a key feature of RCR training and to include substantive face-to-face interaction among participants and faculty. However, recognizing that advances in video conferencing now allow for effective "face-to-face" discussions to occur electronically, institutions may wish to consider incorporating video conferencing options into their RCR instruction, provided that those options are utilized in a way that fosters discussion, active learning, engagement, and interaction among the participants. At the same time, video conferencing should not be the sole means for meeting the requirement for RCR instruction, and a plan that employs only video conferencing will not be considered acceptable, except in the circumstances described in [NOT-OD-10-019](#), such as short-term research training and research education programs."

[National Science Foundation (NSF) Responsible and Ethical Conduct of Reseach (RCR)](#)

"Section 7009 of the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science (COMPETES) Act (42 USC 1862o–1), **as amended, requires that each institution that applies for financial assistance from the Foundation for science and engineering research or education describe in its grant proposal a plan to provide appropriate training and oversight in the responsible and ethical conduct of research to undergraduate students, graduate students, postdoctoral researchers, faculty, and other senior personnel supported by the proposed research project. Such training must include mentor training and mentorship**."

"The responsible and ethical conduct of research (RECR) is critical for excellence, as well as public trust, in science and engineering. RECR involves not only a responsibility to generate and disseminate knowledge with rigor and integrity, but also a responsibility to:

1. conduct peer review with the highest ethical standards;

2. diligently protect proprietary information and intellectual property from inappropriate disclosure; and

3. treat students and colleagues fairly and with respect.

Consequently, education in RECR is considered essential in the preparation of future scientists and engineers."

"Note: The requirement specified in Section 7009 of the America Creating Opportunities to Meaningfully Promote Excellence in Technology, Education, and Science (COMPETES) Act (42 USC 1862o–1), as amended, to have a plan to provide appropriate training and oversight in the responsible and ethical conduct of research to faculty and other senior personnel who will be supported by NSF to conduct research will go into effect for new proposals submitted or due on or after July 31, 2023. NSF, however, encourages the community to establish such training and oversight for faculty and other senior personnel prior to the July 31,2023, implementation. In the interim, proposers must continue to meet the guidance specified in PAPPG Chapter IX.B."

"The RCR training plan must be in place at the time of proposal submission."

[**U.S. Dept. of Agriculture (USDA)** Responsible and Ethical Conduct of Research](#)

"In accordance with sections 2, 3, and 8 of 2 CFR Part 422, institutions that conduct USDA-funded extramural research must foster an atmosphere conducive to research integrity, bear primary responsibility for prevention and detection of research misconduct, and maintain and effectively communicate and train their staff regarding policies and procedures." "The general content of the ethics training will, at a minimum, emphasize three key areas of research ethics: authorship and plagiarism, data and research integration, and reporting misconduct."

Training Requirement Matrix

Federal Agency	To **Whom it Applies**	What	Verification	Completion
National Institutes of Health (NIH)	Trainees, fellows, participants, and scholars, D43, D71, F05, F30, F31, F32, F33, F34, F37, F38, K01, K02, K05, K07, K08, K12, K18, K22, K23, K24, K25, K26, K30, K99/R00, KL1, KL2, R25, R36, T15, T32, T34, T35, T36, T37, T90/R90, TL1, TU2, and U2R;. and Other NIH-funded programs if clearly stated in	Online + in person interaction. In person can be through video-conference, but at some point training must include in person face-to-face interaction.	PIs track and release tracking records upon request. Students keep documentation of their attendance or completion. ORSP verifies completion with PIs.	Institution must confirm and document that RCR training has occurred Training should occur no less than once every 4 years.

	the award opportunity announcements.			
National Science Foundation (NSF)	All undergraduates, graduate students, and postdoctoral researchers, faculty, and other senior personnel who will be supported by NSF to conduct research.	Online	PIs track and release tracking records upon request. Students keep documentation of their attendance or completion. ORSP verifies completion with PIs.	Institution must confirm and document that RCR training has occurred. Training should occur no less than once every 4 years.
US Department of Agriculture (USDA)-National Institute of Food and Agriculture (NIFA)	All program directors, faculty, undergraduate students, graduate students, postdoctoral researchers, and any staff participating in a research project funded by NIFA receive RCR training.	"Off campus" or "On campus"	PIs track and release tracking records upon request; students keep documentation of their attendance or completion.	Institution must confirm and document that RCR training has occurred Training should occur no less than once every 4 years.

RCR Training Topics

- Ethics/Integrity
    - o Misconduct
    - o Reporting

- Stewardship
    - o Collaborative Research
    - o Conflicts of Interest
    - o Data Management
    - o Mentors
    - o Research Subjects
        - Animal Subjects
        - Human Subjects
        - Security and Safety(Biosafety, Hazards, Inclusivity, Discrimination-Free)
        - Whistleblower Protections
- Published Research
    - o Authorship
    - o Peer Review

RCR Training Completion Requirements

The tables below may be copied and used for tracking purposes, however, other tracking spreadsheets are allowed.

RCR Training Completion Tracker	
Project Title(s):	**Sponsor:**
Name:	**Academic Year:**
Cal State East Bay Training Components	**Date Completed (Documentation is Required)**
CITI – RCR - Mandatory	
CITI – IRB – When Applicable	
CITI- IACUC - When Applicable	
In-person instruction provided by Principal Investigator or CSUEB in-person workshops (e.g., CEUs, Certificates, for credit courses, ORSP Workshop, or other programs). --Mandatory for NIH (8 hrs) --Optional for NSF, USDA	
Other: Additional RCR, Compliance, or Research Training may be taken and documented to satisfy the online or in-person training requirements only if pre-approved by PI (in communication with ORSP). (e.g., training during documented department meetings, seminar series, conference trainings, professional association communications)	
RCR training obtained from another institution within the past 18 months, provide documentation	

RCR Tracker for PI Use

Sponsor:										
Project Title:										
Employee or Student Name	Department	Role on Project	Employment Type	Training Type	In Person or Online	Session Title	Source of Training / Delivered By	Training Topics Covered	Total Hours	Comments
Employee 1 Name	Chemistry	PI	Faculty	Meeting	Online	IRB Training	CSUEB IRB Chair	Human Subjects Protection	1	
				CEU Course	In Person	Responsible Conduct of Research	NIH Conference	Misconduct, Reporting of Misconduct	2	
								Emp 1 Total Training Hours Completed	**3**	
Employee 2 Name	Chemistry	Lab Assistant	Graduate Student	Meeting	In Person	Lab Training with PI	Dr. B, PI	Lab Safety and Biohazards	1	
								Emp 2 Total Training Hours Completed	**1**	